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Health Seeking Behaviour of Patients with Skin Disorders in Kano, Nigeria

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Abstract

Background: To determine and compare the health seeking behavior for common skin disorders of an urban and rural community of Kano, Nigeria

Material and Methods: A multistage random sampling was used to select two Local Government Areas (an urban and a rural), each comprising three wards. Structured interviews were conducted to elicit information on the health-seeking behaviour of household members.

Results: Total 164 respondents (82 respondents each from rural and urban areas) were used for the study. The age range was 16 - 82 years, the mean age for both groups was 38.9 years +12.9. There are statistically significant more urban respondents with educational attainment above primary school compared to rural respondents. The predominant job in the rural area is farming. The following diseases are more important to the rural populace: vitiligo, pyoderma and scabies; while tinea capitis, scabies and acne vulgaris are more important to urban dwellers.

Conclusion: The bulk of skin cases in both rural and urban settings are seen by traditional healers, medicine vendors or \auxiliary health workers have knowledge gaps in dermatology skills. Most of these skin diseases are preventable, curable and controllable problems. The capacity of non-dermatologist workers should be improved to recognize common skin diseases. Furthermore referral system should be established such that difficult cases can be referred to dermatologist.

Introduction

There are several factors that determine the health seeking behavior of people. Among them are simplicity of health care systems, culture, age gender socio-economic factors, distance to point of care, physical accessibility of point of care, perceived quality of care and quality of available medications. Insight into pattern and reason for this health seeking behavior will help in formulating appropriate government health policies [**1, 2**].

Whereas in developed countries it is taken for granted that sick persons will seek medical consultation form orthodox medical establishments, in countries with large proportion of people of low socio economic status this pattern may not be observed. Often here people may resort to self-medication or seek alternatives to orthodox medical services. This has been attributed to concerns about the complexity of modern medical facilities, cost of care attitude of care givers, and reservati-

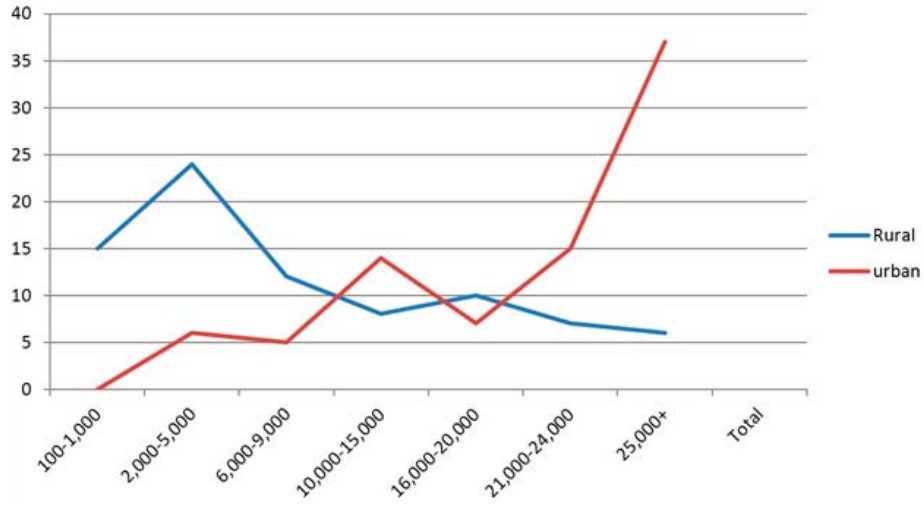

Figure 1. Pattern of income by locality

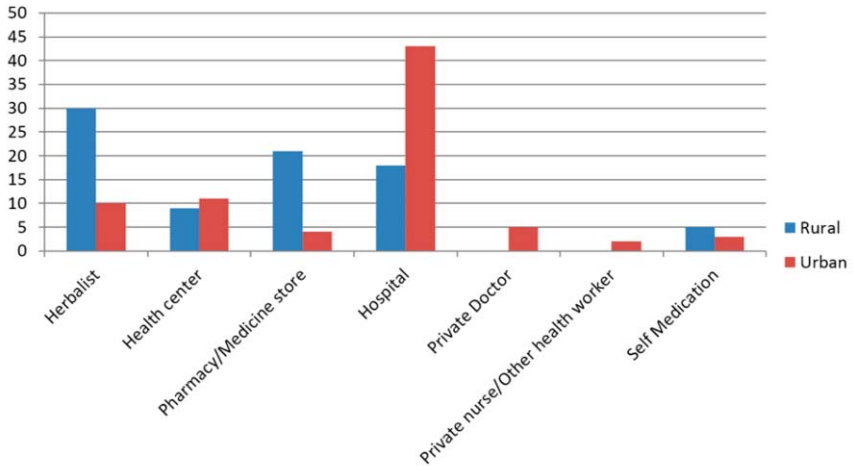

Figure 2. Pattern of dermatological care access preference as first port of call by locality

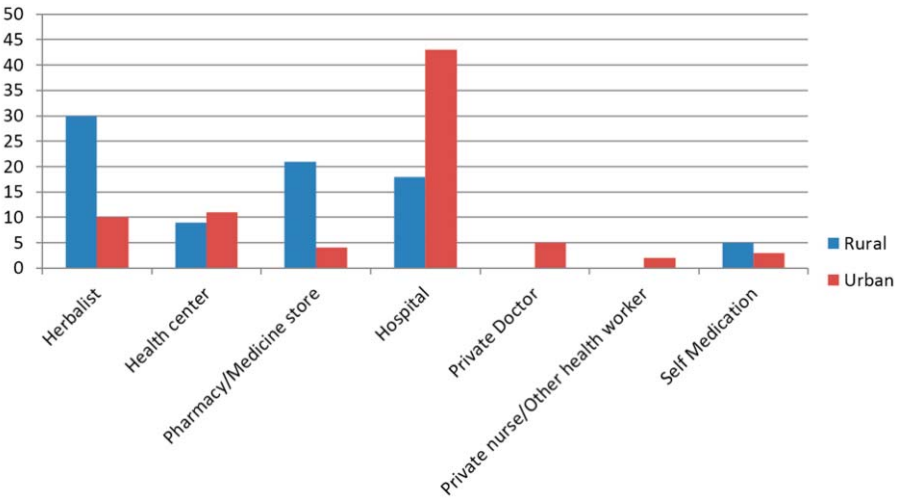

Figure 3. Choice second port of call of dermatologic consultation by locality

ons about the benefits of orthodox medical care [3].

Dermatologic disorders are among the most common causes of morbidity in Nigeria. The few dermatologists in the country work mainly in secondary and tertiary health care levels in urban surroundings. They are not available for 70% of the population living in

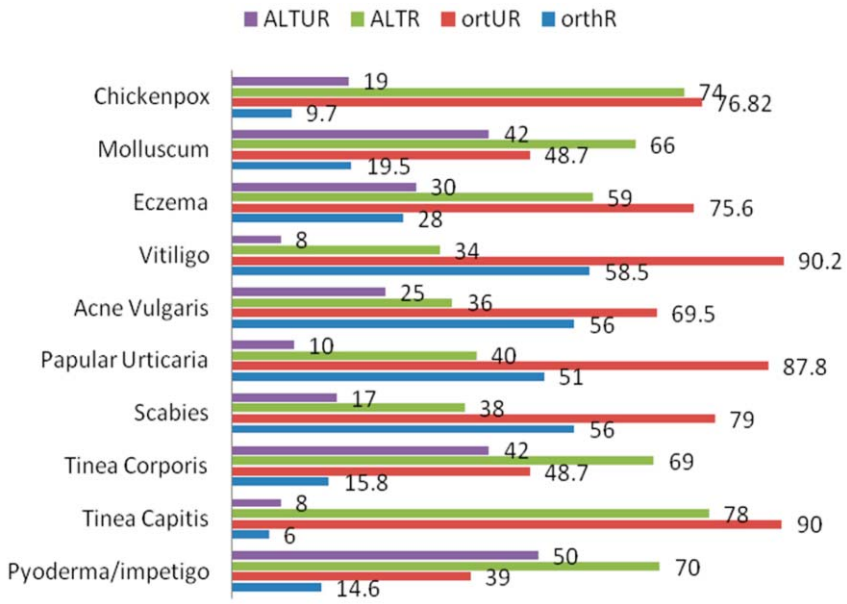

Figure 4. Differences in choices of point of care between urban and rural residence by disease vignettes

rural areas, where most dermatoses are diagnosed as "rash" and treated by auxiliary health workers without proper training in this field. Identifying and training the health care providers chosen as the 1st port of call by persons who have problems with their skin would improve skin care, reduce disease burden and develop a better referral. There is a vast literature on health seeking behavior globally and a few in Nigeria, however there is dearth of literature on health seeking behavior for common skin diseases in Nigeria, thus this study sets out to fill that gap in knowledge.

Setting

Kano State covers an area of 46,053 square kilometres and is divided into 44 LGA. It is the centre of commerce, the economic nerve centre of the northern Nigeria It has a population of 9,955,148 people (2006 census) with almost equal distribution male (51%) and female (49%). 75% of the population lives in the rural area. In total there are 601 PHC facilities, 12 general hospitals (including the specialist hospitals), two tertiary hospital, and many private hospital.

Materials and Methods

This was a cross sectional community survey conducted between July – September 2010. A multistage random sampling was used to select two Local Government Areas (an urban and a rural), each comprising three wards. A semi-structured questionnaire was developed and administered by trained field workers after informed consent. Structured interviews were conducted to elicit information on the health-seeking behaviour of household members.

Vignettes of 10 common skin conditions (pyoderma, tinea capitis, tinea corporis, scabies, popular urticaria, tinea versicolor, eczema, acne vulgaris, molluscum contagiosum, vitiligo) were shown for identification while relevant information was sought. Descriptive and inferential methods were used to analyse the data.

Results

A total 164 respondents (82 respondents each from rural and urban areas) were used for the study. The age range was 16 - 82 years, the mean age for both groups was 38.9 years +12.9. There is no statistically significant difference in the urban and rural age bands except for the age bracket 26-35 years. Male to female ratio was 2:1, with no locality difference. Most of respondents were married, 92.7% (urban) and 84.1% (rural), however there was no statistically significant difference between the two. About a fifth of urban and up to 52% of rural respondents had no or informal education, thus, more than three-quarters (78.6% vs 48% rural) of urban respondents had formal education (**Table 1**). In both the communities, majority of the respondents (87.8 % rural) vs 63.4% urban) re-

Table 1. Demographic Characteristic of Respondents by Locality

		Rural	Urban	
		N (%)	N (%)	χ_2 -Test
Age of Respondents	16-25	13 (15.9)	19 (23.1)	0.230
	26-35	29 (35.4)	11(13.4)	0.001
	36-45	13 (15.9)	20 (24.4)	0.172
	46-55	10 (12.2)	12 (14.6)	0.646
	>55	17 (20.7)	20 (24.4)	0.575
Sex	Males	59 (71.9)	51 (62,2)	0.184
	Females	23 (28.1)	31 (37.8)	0.184
Occupation	Civil Servant	7 (8.5)	21 (25.6)	0.003
	Teaching	8 (9.7)	2 (2.4)	0.05
	Farming	49 (59.8)	6 (7.3)	0.000
	Business	4 (4.8)	7 (8.5)	0.349
	Trading	11 (13.4)	41 (50)	0.000
	Students	2 (2.4)	2 (2.4)	0.99
	Security	1 (1.2)	3 (3.7)	0.313
Marital status	Married	69 (84.2)	76 (87.8)	0.087
	Widowed	8 (9.8)	3 (3.7)	0.112
	Separated	5 (6.1)	2 (2.4)	0.247
Educational status	Primary	21 (25.6)	10 (12,2)	0.02
	Secondary	14 (17.0)	29 (35.4)	0.007
	Tertiary	4 (4.8)	25 (30.5)	0.0007
	Informal	30 (36,5)	16 (19.5)	0.01
	None	13 (15.8)	2 (2.4)	0.002
Monthly Income	< 10,000	51 (62.1)	11 (12.3)	0.000
	10,000-15,000	8 (9.8)	14 (17)	0.169
	16,000-20,000	10 (12.1)	7 (8.5)	0.442
	21,000-25,000	7 (8.5)	15 (18.3)	0.066
	>25,000	6 (6.3)	37 (45)	0.0000
Distance to Health Facility	0-4	72 (87.8)	52 (63.4)	0.002
	5-10	4 (4.8)	19 (23.2)	0.0007
	>10	7 (8.5)	2 (2.4)	0.086

side <5 km away from the health centre, while less than 15% of the respondents in the two communities live >10 km away from a health facility. Half (53.4% Vs 21.9%) of rural respondents had no or informal education, in contrast, three-quarters (78.6% vs 48%) of urban respondents had formal education. There are statistically significant more urban respondents with educational attainment above primary school compared to rural respondents.

The predominant job in the rural area is farming (59.8% vs 7.3%) while trading and public service (58.5% vs 18.2%) seem to be the principal occupations in the urban area, with statistically significant difference between the two localities.

Urban respondents cited long waiting tine/attitude of staff as repellent to public health facility while major reasons for the choice of health facility by rural respondent included the notion that the disease is not meant for hospital treatment, proximity of the facility and low cost of treatment (**Table 2**).

Majority of the respondents (36.7 rural vs urban 55.4%) waited at least a week after onset of illness before seeking treatment, 20.1% rural vs 26.3%urban waited for 7-14 days, 18.4 rural % vs 13.8% urban waited for between 2-3 weeks and 25.2% rural vs 4.5% urban waited for over a month.

Monthly income of 71.5% of the rural respondents (vs 25% of urban respondents) was <15,000 Naira (US$100), 20.5% of the rural versus 22% of the urban respondents earned between 15,000-25,000 Naira (US$100-$166.7) and only 8%of the rural versus 53% earned >25,000 (US$166.7) (**Figure 1**).

Table 2. Reasons for the choice facility *Fishers exact test used

Reasons for the Choice Facility	Rural	Urban	
	N (%)	N (%)	χ^2–Test
Confident of Cure	14 (17.1)	8 (9.8)	0.132
Ignorance of Existence of a Health Facility	3 (3.6)	1 (1.2)	0.62*
Disease not for Hospital	15 (18.3)	2 (2.4)	0.0001
Proximity	16 (19.5)	9 (10.9)	0.128
Lower Cost	24 (29.3)	12 (14.6)	0.02
Long Waiting Time/Staff Attitude	5 (6.1)	46 (56.1)	0.00001
No Response	2 (2.4)	0 (0)	0.496*

The study showed that a significantly higher proportion (n=51, 62.2%) of the rural people patronize herbalists and drug sellers as first port of call for treatment of skin ailments than the urban people (n=14, 17.1%, P< 0.05) (**Figure 2**).

In the event of failed first treatment, respondents favoured a primary health facility/hospital (n=34, 41.4%) in both the rural and (n=61, 74.4%) urban population (**Figure 3**). The following diseases are more important to the rural populace: vitiligo, pyoderma and scabies; while tinea capitis, scabies and acne vulgaris are more important to urban dwellers (**Figure 4**).

Discussion

The mean of age of the studied populations reflect the greater reality of Nigeria's demographic distribution with a predominant proportion of young persons [**4**]. This has been attributed to the high fertility rate and low life expectancy. This creates a population base of largely young people. It also represents the crux of those that will be more willing and amenable to participate in studies like this. There were more civil servant among urban respondents correlating with the higher availability of white collar jobs in urban areas. The most predominant civil service job available in the rural area is teaching and hence more teachers were seen among rural responders. Conversely there were more rural farmers because that is the predominant occupation in Nigerian rural areas.

Educational exposure plays a significant role in molding opinion and decisions taken with regards to health. Those that are more educated are likely to make more informed decision. The finding of this study shows that most of the respondent from rural areas only had primary school education, while the urban respondent had higher learning attainments. This finding is similar to what was found by other researchers in developing countries [**5, 6, 7**].

The decision to access formal health services is often hinged on socio-economic status. Out of pocket payment represents 70 % of health expenditure in Nigeria. Hence those with the means to pay for such services are more likely to access them. This study shows that orthodox dermatological services are more likely to be accessed by those of higher socio-economic standing [**8, 9**].

Although this study shows that more rural respondent are at closer distances to health care centers providing dermatological care, yet they are more likely to seek non-orthodox dermatological services. Rural dwellers often consider dermatological diseases to be within the portfolio of herbal healers. They also cite distance to points of care and prohibitive cost of care as reasons why they do not consider orthodox dermatological care as their first option. Like several other earlier studies, this study found that urban dwellers do not access orthodox dermatological services citing long waiting tine; poor reception of staff at the health post [**10, 11, 12**].

A sizable number of responders from both localities delay seeking dermatological treatment, even as rural dweller tend to wait longer. This pattern has been attributed to attempts as preliminary self-medication in an attempt to avoid incurring medical bills.

In rural communities this scenario is complicated by initial predisposition to seeking herbal remedy before seeking orthodox medical care, often when the first option shows no ap-

parent benefit. There is a fairly strong correlation between knowledge of the variety of medical treatment options and the willingness to engage their services. Thus it is seen that urban dwellers having the benefit of knowing more about the option for orthodox dermatological consultation tend to seek alternative medical care across the increasing ladder of sophistication in the medical health systems. Studies from other developing countries have similarly suggested this trend of attempts at seeking numerous diverse therapeutic options within the same health system in a single cultural scenery [**13, 14**].

The study has shown that rural dwellers are more preoccupied with skin infection and infestations, being the bigger dermatological challenge in this localities. Whereas, in urban areas cosmetic dermatological diseases are of greater concern reflecting the attitude of a more educated and affluent society.

Economic activities in rural Nigeria are not vibrant, mostly consisting of menial jobs, and subsistence farming. These endeavors most often bring little economic returns, even though they may consume a lot of energy or predispose to risk of developing a wide spectrum of medical ailments including dermatological diseases. This study found a predominant proportion of low income earners to be from the rural areas. There is fairly robust evidence linking poverty and variety and prevalence of certain dermatological disease, most especially does associated with skin infestations. Equally most of the respondents with higher earning are from the urban areas, which also reflect the higher economic opportunities abound in urban areas.

Conclusion

The bulk of skin cases in both rural and urban settings are seen by traditional healers, medicine vendors or auxiliary health workers have knowledge gaps in dermatology skills. Most of these skin diseases are preventable, curable and controllable problems. The capacity of non-dermatologist workers should be improved to recognize common skin diseases. Furthermore referral system should be established such that difficult cases can be referred to dermatologist.

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